

Atty. Dkt. No. 054707-1231

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Gregory S. HAMILTON et al.  
Title: HETEROCYCLIC KETONE AND  
THIOESTER COMPOUNDS AND  
USES  
Appl. No.: 10/615,803  
Filing Date: 07/10/2003  
Examiner: Unassigned  
Art Unit: 1625

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR § 1.56**

Mail Stop PATENT APPLICATION  
Commissioner for Patents  
PO Box 1450  
Alexandria, Virginia 22313-1450

Sir:

Applicants submit herewith on Form PTO/SB/08 a listing of the documents cited by or submitted to the U.S. PTO in parent application Serial No. 10/104,242, filed 03/25/2002. As provided in 37 CFR § 1.98(d), copies of the documents are not being provided since they were previously submitted to the United States Patent & Trademark Office in the above-identified parent application.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR § 1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.

**TIMING OF THE DISCLOSURE**

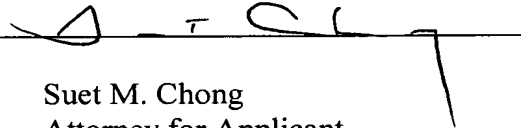
The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date 10/31/03

By 

FOLEY & LARDNER

Customer Number: 29728

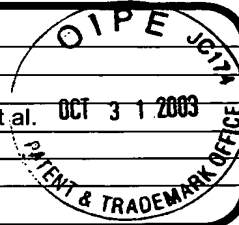
Telephone: (202) 295-4163

Facsimile: (202) 672-5399

Suet M. Chong  
Attorney for Applicant  
Registration No. 38,104

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Substitute for form 1449B/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  Date Submitted: <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b> Application Number: 10/615,803 Filing Date: 07/10/2003 First Named Inventor: Gregory S. Hamilton et al. Group Art Unit: 1625 Examiner Name: Unassigned Attorney Docket Number: 054707-1231	
Sheet	1	of	12		



U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	A1	3,203,961		WU	08/31/1965	
	A2	3,458,515		ARCHIBALD	07/29/1969	
	A3	3,459,770		FREED	08/05/1969	
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	A42	6,218,424		HAMILTON	04/17/2001	

Examiner  
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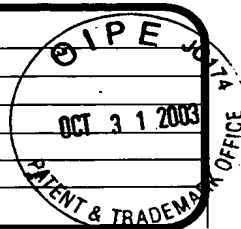
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				<b>Applicati n Number</b>	10/615,803
				<b>Filing Dat</b>	07/10/2003
				<b>First Nam d Inventor</b>	Gregory S. Hamilton et al.
				<b>Group Art Unit</b>	1625
				<b>Examiner Name</b>	Unassigned
				<b>Attorney Docket Number</b>	054707-1231
<b>Sheet</b>	2	<b>of</b>	12		



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		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	A43	DE	3508251			09/11/1986		
	A44	DE	3931051			03/29/1990		
	A45	DE	4015255			11/14/1991		
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	A51	EP	196841			10/08/1986		
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	A53	EP	333174			09/20/1989		
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	A56	EP	405994			01/02/1991		
	A57	EP	419049			03/27/1991		
	A58	EP	468339			01/29/1992		
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	A63	JP	4149166			05/22/1992		
	A64	JP	05178824			07/20/1993		
	A65	WO	96/41609			12/27/1996		
	A66	WO	97/36869			10/09/1997		
	A67	WO	95/35367			12/28/1995		
	A68	WO	95/35308			12/28/1995		
	A69	WO	95/26337			10/05/1995		
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	A73	WO	92/21313			12/10/1992		
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	A78	WO	96/15101			05/23/1996		
	A79	WO	94/13629			06/23/1994		
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	A81	WO	95/12572			05/11/1995		
	A82	WO	94/07858			04/14/1994		
	A83	WO	93/07269			04/15/1993		
	A84	WO	96/06097			02/29/1996		
	A85	WO	94/05639			03/17/1994		

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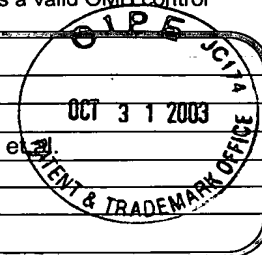
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				<b>Filing Date</b>	07/10/2003
Date Submitted:  (use as many sheets as necessary)				<b>First Name and Inventor</b>	Gregory S. Hamilton et al.
				<b>Group Art Unit</b>	1625
Sheet 3 of 12				<b>Examiner Name</b>	Unassigned
				<b>Attorney Docket Number</b>	054707-1231



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	A86	WO	91/04985			04/18/1991		
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	A88	WO	92/00278			01/09/1992		
	A89	WO	88/09789			12/15/1988		
	A90	WO	90/12805			11/01/1990		
	A91	WO	91/13088			09/05/1991		
	A92	WO	92/03472			03/05/1992		
	A93	WO	96/17816			06/13/1996		
	A94	ZA	9207782			04/28/1993		

NON PATENT LITERATURE DOCUMENTS				
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	A95	ASKIN, et al., "Efficient Degradation of FK-506 to a versatile synthetic intermediate," <u>J. Org. Chem.</u> , 1990, Vol. 55(20), pgs. 55451-4.		
	A96	GOULET, et al., "Degradative studies on the tricarbonyl containing macrolide rapamycin," <u>Tetrahedron Lett.</u> , 1990, Vol. 31(34), pgs. 4845-8.		
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	A99	RAO, et al., "Studies directed towards the synthesis of immunosuppressive agent FK-506: construction of the tricarbonyl moiety," <u>Tetrahedron Lett.</u> , 1990, Vol. 31(10), Pgs. 1439-42.		
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	A101	FINBERG, et al., "Prevention of HIV-1 Infection and Preservation of CD4 Function by the Binding of CPFs to gp120," <u>Science</u> , 1990, Vol. 249, pgs. 287-91.		
	A102	GOODFELLOW, et al., "p-Nitrophenyl 3-diazopyruvate and diazopyruvamide, a New Family of Photoactivatable Cross-Linking Bioprobes," <u>Biochemistry</u> , Vol. 28(15), pgs. 6346-60.		
	A103	WASSERMAN, et al., "Synthesis of the tricarbonyl region of FK-506 through an amidophosphorane [Erratum to document cited in CA111(7):57366p]," <u>J. Org. Chem.</u> , 1989, Vol. 54(22), pg. 5406.		

Examiner Signature		Date Considered	
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		Filing Date	07/10/2003
		First Named Inventor	Gregory S. Hamilton et al. OCT 31 2003
		Group Art Unit	1625
		Examiner Name	Unassigned
Sheet	4	of	12
		Attorney Docket Number	054707-1231

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	A104	WASSERMAN, et al., "Synthesis of the tricarbonyl region of FK-506 through an amidosphere," <u>J. Org. Chem.</u> , 1989, Vol. 54(12), pgs. 2785-6.	
	A105	DRAGOVICH, et al., "Structured-Based Design of Novel, Urea-Containing FKBP12 Inhibitors," <u>J. Med. Chem.</u> , 1996, Vol. 39, pgs. 1872-1884.	
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	A107	GOLD, et al., "The Immunosuppressant FK506 increases functional recovery and nerve regeneration following peripheral nerve injury," <u>Restorative Neurology and Neuroscience</u> , 1994, Vol. 6, pgs. 287-296.	
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	A115	SOAI, et al., "Asymmetric Allylation of $\alpha$ -keto amides Derived from (S)-proline esters," <u>Pept. Chem.</u> , 1986, Vol. 24, pgs. 327-30.	
	A116	MUNEGUMI, et al., "Asymmetric Catalytic Hydrogenations of N-pyruvoyl-(s)-proline esters," <u>Bull. Chem. Soc. Jpn.</u> , 1987, Vol. 60(1), pgs. 243-53.	
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	A118	SOAI, et al., "Sodium borohydride as diastereoselective reducing agent of chiral $\alpha$ -keto amides," <u>Pept. Chem.</u> , 1982, Vol. 20, pgs. 81-4.	

Examiner Signature	Date Considered
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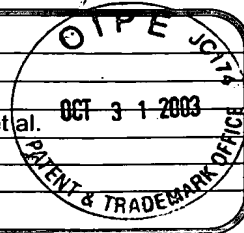
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	A119	SOAI, et al., "Asymmetric Synthesis of Functionalized tertiary alcohols by diastereoselective allylation of chiral $\alpha$ -keto amides derived from (S)-proline esters: control of stereochemistry based on saturated coordination of Lewis acid," <u>J. Org. Chem.</u> , 1986, Vol. 57(17), pgs. 3290-5. (English)	
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	A121	SOAI, et al., "Diastereoselective reduction of chiral $\alpha$ -keto amides derived from (S)-proline esters with sodium borohydride. Preparation of optically active $\alpha$ -hydroxy acids," <u>J. Chem. Soc.</u> , 1985, Vol. 1(14), pgs. 769-72.	
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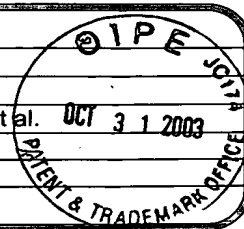
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				First Named Inventor	Gregory S. Hamilton et al.
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				Examiner Name	Unassigned
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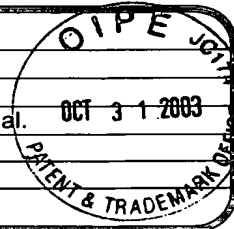
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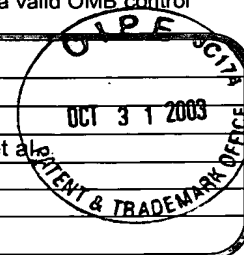
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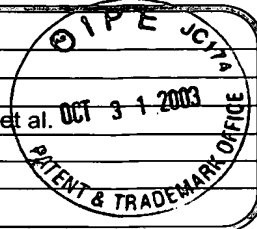
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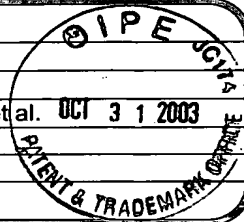
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		Filing Date	07/10/2003
		First Named Inventor	Gregory S. Hamilton et al.
		Group Art Unit	1625
		Examiner Name	Unassigned
Sheet 11 of 12	Attorney Docket Number	054707-1231	



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	A207	Holt, Dennis A. et al. "Design, Synthesis, and Kinetic Evaluation of High-Affinity FKBP Ligands and the X-ray Crystal Structures of their Complexes with FKBP12", J. Am. Chem. Soc., 1993, Vol. 115, pgs. 9925-39.	
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	A222	Kost, A.N. et al. "Indole Chemistry, XXVII. 2-(Haloacetyl) indoles", <u>Khim Geterotsikl, Soedin.</u> , (1971) Vol. 7(11), pgs. 1522-26.	
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